

REMARKS

Claims 1-81 are pending in the present application. The Examiner has objected to the drawings, has objected to claim 62 and has rejected claims 1-81. Applicants have amended claims 3, 44-46 and 62 for noted informalities.

I. OBJECTION TO THE DRAWINGS

The Examiner has objected to the drawings filed on October 19, 2000 as being informal. Applicants respectfully submit herewith a formal set of drawings. It is respectfully requested that the objection be withdrawn with respect to the drawings.

II. OBJECTION TO CLAIM 62

The Examiner has objected to claim 62 for a noted informality, namely, a grammatical error. Applicants have amended claim 62 by replacing the final punctuation “;” with a --.--. It is therefore respectfully requested that the objection be withdrawn with respect to claim 62.

III. INFORMALITIES NOTED BY APPLICANTS

Applicants have noted minor informalities with respect to claims 3 and 44-46. In particular, Applicants corrected four typographical errors. In claim 3 and 46, the word “none” was inadvertently used instead of “one”. In claim 44, the final punctuation “.” was inadvertently repeated. In claim 45, a space was inadvertently placed between the “r” and the “s” in the word “filters”.

IV. REJECTION OF CLAIMS 1-61 and 75-81 UNDER 35 U.S.C. § 102(e)

Claims 1-61 and 75-81 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,591,091 (“Vorenkamp”). Applicants respectfully traverse the rejection.

A. Claims 1-22

Vorenkamp does not describe each and every element set forth in claim 1. For example, Vorenkamp does not describe “a bypass circuit coupled across one of the cascaded filters”. The Examiner states that Vorenkamp describes these elements of claim 1 in col. 11, lines 10-65; col. 12, lines 7-51; and col. 27, line 48 to col. 28, line 67 of Vorenkamp. However, a careful review of the cited text does not reveal “a bypass circuit” and, in particular, “a bypass circuit coupled

across one of the cascaded filters”. For example, Applicants respectfully draw the attention of the Examiner to col. 12, lines 15-38, which describe “cascaded filters”, but col. 12, lines 15-38 do not describe a bypass circuit that is coupled across one of the cascaded filters. In general, the Examiner has relied heavily on FIGS. 5 and 19, which do not appear to illustrate any bypass circuit and certainly not a bypass circuit across one of the cascaded filters. In fact, FIGS. 5 and 19, taken alone, do not illustrate cascaded filters, only a low pass filter (LPF) and a band pass filter (BPF). For at least the above reasons, Vorenkamp does not anticipate claim 1.

Furthermore, Applicants respectfully submit that Vorenkamp does not describe each and every element as set forth in claims 2-22, which depend from claim 1. For example, since Vorenkamp does not describe a bypass circuit, Vorenkamp does not describe any elements set forth in claims 2-22 related to the bypass circuit. For example, Vorenkamp does not describe a bypass circuit comprising a switch (claim 2) or bypass circuits each comprising a switch (claim 5). In fact, there is no mention of a switch at all in the col. 11, lines 10-65 of Vorenkamp cited by the Examiner with respect to claim 2 and 5. In another example, Vorenkamp does not describe “a plurality of bypass circuits including the bypass circuit, the bypass circuit each being coupled across a different one of the cascaded filters” as set forth in claim 3. In yet another example, Vorenkamp does not describe a plurality of bypass circuits in which “each of the bypass circuits are adapted for individual control.” Instead, the Examiner has cited text which only describes designing a particular band pass filter with preset characteristics.

Moreover, Applicants respectfully submit that, after reviewing the respective descriptions and figures in Vorenkamp cited by the Examiner with respect to claims 6-22, at least the following elements are not described by Vorenkamp: a biquad filter; a complex filter; a differential filter; a pole and a zero; a programmable feedback resistor; a programmable feedback capacitor; and a plurality of resistors each having a switch coupled thereacross. For at least the above reasons, Vorenkamp does not anticipate claims 2-22.

It is therefore respectfully requested that the rejection under 35 U.S.C. § 102(e) be withdrawn with respect to claims 1-22.

B. Claims 23-43

Vorenkamp does not describe each and every element set forth in claim 23. For example, Vorenkamp does not describe “bypass means for bypassing at least one of the cascaded filters”. The Examiner states that Vorenkamp describes these elements of claim 23 in col. 11, lines 10-65

and col. 12, lines 7-51 of Vorenkamp. Applicants have carefully reviewed the text cited of Vorenkamp in support of the rejection and find no support for bypassing a cascaded filter. In addition, Applicants have also reviewed FIG. 5 of Vorenkamp which corresponds to the cited text. FIG. 5 does not show any way in which to bypass any of the illustrated filters (e.g., a low pass filter (LPF) and two band pass filters (BPF)) or any part of the illustrated filters. For at least the above reasons, Vorenkamp does not anticipate claim 23.

Since claims 24-43, which depend from claim 23, recite many of the same or similar elements as recited in claims 2-21 and since the Examiner used the same or similar arguments in rejecting claims 24-43 as were used in rejecting claims 2-21, Applicants respectfully make the same or similar arguments with respect to claims 24-43 as were made with respect to claims 2-21. For at least the above reasons, Vorenkamp does not anticipate claims 24-43.

It is therefore respectfully requested that the rejection under 35 U.S.C. § 102(e) be withdrawn with respect to claims 23-43.

C. Claims 44-61

Vorenkamp does not describe each and every element set forth in claim 44. For example, Vorenkamp does not describe “a biquad filter” and “a polyphase filter coupled to the biquad filter”. The Examiner states that Vorenkamp describes a biquad filter in elements 510, 512 of FIG. 5; col. 11, line 25-47; and col. 27, lines 31-55 of Vorenkamp and a polyphase filter coupled to the biquad filter in col. 11, lines 10-65 and col. 12, lines 7-51 of Vorenkamp. With respect to “a biquad filter”, Applicants respectfully submit that a biquad filter is not described in the text or the figure of Vorenkamp cited by the Examiner. For example, FIG. 5 appears to illustrate a block 510, which is a low pass filter (LPF), and an output 512, which is an output of a band pass filter (BPF). FIG. 5 does not appear to show a biquad filter or a polyphase filter. Col. 11, lines 10-65 of Vorenkamp do not even discuss the elements of a filter circuit and certainly do not describe a biquad filter or a polyphase filter. Furthermore, col. 27, lines 31-55 fail to describe a polyphase filter. Col. 12, lines 7-51 of Vorenkamp do describe cascaded filters; however, col. 12, lines 7-51 of Vorenkamp do not describe a biquad filter or a polyphase filter. Accordingly, Vorenkamp does not anticipate claim 44.

Furthermore, Applicants respectfully submit that Vorenkamp does not describe each and every element as set forth in claims 45-61, which depend from claim 44. For example, claim 45 recites “the biquad filters being intertwined with the polyphase filters”. The Examiner cites col.

11, lines 10-65 and col. 12, lines 7-51 of Vorenkamp as describing these elements as set forth in claim 45. Related to the discussions above, the text cited in Vorenkamp does not describe biquad filters or polyphase filters, and, in particular, the cited text does not describe biquad filters being *intertwined* with polyphase filters. For at least the above reasons, Vorenkamp does not anticipate claim 45.

Since claims 46-61, which depend from claim 44, recite many of the same or similar elements as recited in claims 2-21 and since the Examiner used the same or similar arguments in rejecting claims 46-61 as were used in rejecting claims 2-21, Applicants respectfully make the same or similar arguments with respect to claims 46-61 as were made with respect to claims 2-21. For at least the above reasons, Vorenkamp does not anticipate claims 46-61.

It is therefore respectfully requested that the rejection under 35 U.S.C. § 102(e) be withdrawn with respect to claims 44-61.

D. Claims 75-81

Vorenkamp does not describe each and every element set forth in claim 75. For example, Vorenkamp does not describe “applying gain to the signal, the applied gain being programmable”. The Examiner states that these elements are described in col. 12, line 15 to col. 14, line 62. Applicants respectfully submit that the elements are not described in the text of Vorenkamp cited by the Examiner. In fact, nothing is described as programmable in the cited text. For at least these reasons, Vorenkamp does not anticipate claim 75.

Furthermore, Vorenkamp does not describe each and every element as set forth in claims 76-81, which depend from claim 75. For example, claims 78-80 recite introducing a zero or introducing a plurality of zeros. The Examiner states that these elements are found in col. 10, lines 1-60; col. 11, lines 10-65; col. 12, lines 7-51; col. 13, lines 21-50 and col. 14, lines 1-62 of Vorenkamp. However, the text cited by the Examiner does not describe introducing a zero or a plurality of zeros. In another example, claim 81 recites “programming an order of complex filtering”. The Examiner states that these elements are found in col. 13, line 8 to col. 14, line 62 of Vorenkamp. However, the text cited by the examiner does not describe programming an order of complex filtering. In fact, the text is devoid of any mention of programming at all. For at least the above reasons, Vorenkamp does not anticipate claims 76-81.

It is therefore respectfully requested that the rejection under 35 U.S.C. § 102(e) be withdrawn with respect to claims 75-81.

V. REJECTION OF CLAIMS 62-74 UNDER 35 U.S.C. § 103(a)

Claims 62-74 stand rejected under 35 U.S.C. § 103(a) as being obvious over Vorenkamp in view of U.S. Patent No. 5,283,484 ("Brehmer"). Applicants respectfully traverse the rejection.

35 U.S.C. § 103(c) states that "[s]ubject matter developed by another person, which qualifies as prior art only under one or more subsections (e), (f), and (g) of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person."

Applicants respectfully submit that Vorenkamp is disqualified as a reference under 35 U.S.C. § 103(a) in view of 35 U.S.C. § 103(c). As indicated on the face of the patent, the subject matter of Vorenkamp was assigned solely to the Broadcom Corporation of Irvine, California. On the filing date (i.e., October 19, 2000) of the present application (i.e., Application Ser. No. 09/692,420), the claimed invention was owned or subject to an obligation of assignment solely to the Broadcom Corporation of Irvine, California. The Examiner is invited to examine the recorded assignment document at Reel/Frame No. 011827/0609 recorded May 21, 2001 for the present application. Additional information about the parent application of the present application or priority documents (e.g., provisional applications) of the parent application can be provided, if requested by the Examiner; however, M.P.E.P. 706.02(I)(1)¹ appears to support the contention that the claimed invention need only be owned by the same person or subject to an obligation of assignment to the same person as of the filing day of the continuing application.

Since the Examiner cannot maintain an obviousness rejection over Vorenkamp in view of Brehmer, Applicants respectfully request that the rejection under 35 U.S.C. § 103(a) be withdrawn with respect to claims 62-74.

¹ M.P.E.P. § 706.02(I)(1) states that "[t]he mere filing of a continuing application on or after November 29, 1999, with the required evidence of common ownership, will serve to exclude commonly owned 35 U.S.C. 102(e) prior art that was applied, or could have been applied, in a rejection under 35 U.S.C. 103 in the parent application."


VI. CONCLUSION

In view of at least the foregoing, it is respectfully submitted that the pending claims 1-81 are in condition for allowance. Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the below-listed telephone number.

Please charge any required fees not paid herewith or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

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Respectfully submitted,


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